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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

November 3, 1977

RECEIVED BY
Office of
Vice President
Agricultural Sciences
NOV 7 1977
MNS 11/7

Dr. M.N. Schroth
Professor of Plant Pathology
Office of the Vice-President
Agriculture & University Services
University of California
2200 Univeristy Avenue
Berkeley, California 94720

Dear Milt:

I am writing to you in regard to the application for registration of the bacterium, Agrobacterium radiobacter, as a biological control agent for the crown gall disease of plants as submitted by Richard B. Bhame and L.W. Moore. I would appreciate your directing my remarks to the proper authority in the registration division at the Environmental Protection Agency.

We have examined more than 40 cultures of A. radiobacter which were isolated from clinical specimens. The primary sources of origin were: sputum, 8; urine, 4; blood, 3; and conjunctiva, 3. All investigations, as to the possibility of pathological significance, have given no indication that these bacteria are etiological agents of human disease. These observations substantiate the findings of Lautrop (Acta Pathol. Microbiol. Scand. 187: 63-64. 1967). Lautrop studied 10 Agrobacterium isolates, 4 of which were identified as A. radiobacter, and he concluded that they evidenced no clinical significance.

Numerous reports in the literature have indicated the ubiquitous nature of A. radiobacter in the soils of the countries of this planet. Thus, any effort to emphasize that this microorganism is saprophytic would be an understatement of fact. Like all entities in this life, this bacterium has an explicit niche, and, that appears to be agriculturally rather than clinically oriented

Personally, I would hope that the knowledge, obtained through microbiological experimentation, amassed over the past decades would be of primary concern in arriving at any decision concerning the registration of this bacterium. The fact that animals as well as humans have been continuously exposed to A. radiobacter, without any evidence of pathological events, does not warrant any argument for probable pathogenesis. Moreover, our laboratory has processed approximately 50,000 clinical isolates over the years. Of this number, only 41 cultures have been proven to be A. radiobacter. Certainly, this frequency of occurrence would in itself not support any opinion for clinical significance when one considers the number of human exposures which occur daily.

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I realize the tremendous potential which this agent has for the control of crown gall pathology. Likewise, I also realize that extreme care must be exercised when there is human manipulation of any biological system. However, I do not think it necessary to consider animal pathology as a factor in reaching a decision as to the implementation of A. radiobacter as a biological aid in controlling crown gall disease.

If I can be of further assistance, please do not hesitate to contact me.

Sincerely yours,

P.S. Riley, Ph.D.
Bacteriology Division
Clinical Bacteriology Branch
Bldg. 5, Rm. 210

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